Expanding NSW - Queensland Transmission Transfer Capacity Stakeholder Webinar

Stakeholder webinar

TransGrid, in partnership with Powerlink, hosted a webinar as part of the engagement for the Regulatory Investment Test for Transmission (RIT-T) process on expanding transmission transfer capacity between New South Wales (NSW) and Queensland via the interconnector (QNI). The webinar provided an overview of the Project Specification Consultation Report (PSCR), broader RIT-T process and provided stakeholders and interested parties the opportunity to have their questions answered.

Questions and answers

1. **Does the RIT-T cover both Group 1 and Group 2 projects or only Group 1 projects identified in the 2018 ISP?**

   The RIT-T considers options that would address both Group 1 and Group 2 projects in the 2018 Integrated System Plan (ISP).

2. **Will there be a reassessment of Stage 2 projects at a later date?**

   The outcome of this RIT-T is expected to be the identification of the 'preferred option', which is likely to be a series of investments covering QNI Stage 1 and QNI Stage 2. Whether there is a reassessment of Stage 2 projects at a later date depends on the outcome of this RIT-T assessment and a range of factors. These include the ranking of the alternative Stage 2 projects and their optimal timing, the lead time for each project and whether there is any 'material change in circumstances' following completion of this RIT-T and the time at which an investment commitment decision for any subsequent Stage 2 process is needed.

   If the assumptions or market conditions are materially different, further assessment may be required.

3. **Would you consider a preferred option made up of multiple options in the consultation report?**

   Yes. In our assessment, we will analyse the net benefits of each option individually. If there are multiple options that have net benefits, we will assess these in combination. This includes potential combinations of network and non-network solutions, where a combined option may realise higher market benefits.

4. **When assessing net market benefits - will you identify the share of benefit allocated between NSW and Queensland consumers, and the apportion of cost?**

   The RIT-T requires the identification of the credible option that maximises the net benefit to all those who produce, consume and transport electricity across the whole of the National Electricity Market (NEM).

   Notwithstanding this, we will seek to provide regional information where it can be readily derived from the market modelling. However we note that the allocation of net benefit between NEM regions is not a factor that can be taken into account under the RIT-T framework in deriving the preferred option.
   We also note that the apportioning of costs between NSW and Queensland consumers depends on the Inter-regional Transmission Use Of System (IR-TUOS) arrangements, and therefore is not solely

determined by the quantum of investment in each jurisdiction. Projecting future IR-TUOS amounts is highly uncertain, and we do not anticipate that we will be able to report on this in the Project Assessment Draft Report (PADR).

5. **How do you propose to reconcile the current approach to the RIT-T with the Coordination of Generation and Transmission Investment (COGATI) report which suggested that there should be distinctive staging of investment?**

   The options being considered in this RIT-T do have distinctive stages. In particular we are considering various options for a Stage 1 incremental investment, followed by a later and more substantive Stage 2 investment. Considering both stages as part of the same RIT-T is consistent with the RIT-T framework and allows us to take account of potential interactions between the first and second stage investments. The nature and timing of the investment stages will be determined by the outcomes of the market modelling.

6. **Why should consumers pay for new generation connection? The COGATI report is changing the dynamic, but this investment might pre-date those changes undermining the impact.**

   This project does not include regulated investment to fund new generation connections, but is to relieve the existing and forecast congestion on the shared transmission network between NSW and Queensland. The options that are being considered in this RIT-T have the characteristics of shared transmission assets, and are not expected to be affected by alternative funding models that may be introduced for transmission to connect new generation.

7. **Has series compensation of lines been considered?**

   Series capacitors were considered in a previous RIT-T for QNI augmentation conducted by Powerlink and TransGrid in 2012-14, but were not progressed beyond the PADR due to their likely interactions with generators near QNI (sub-synchronous resonance). For this reason, options involving series compensation were considered not to be technically feasible options for this RIT-T assessment.

   We are however aware of technologies that can now provide series compensation without using series capacitors, which has the potential to alleviate these technical issues. We will consider the potential to use these new technologies further and will consider all credible options proposed in submissions.

8. **The Energy Security Board (ESB) rule change to allow contingent project process to run concurrently rather than subsequently, when is the decision of this rule change expected to be made?**

   The 'Early implementation of ISP priority projects (Ref ERC0258) rule change proposal' was published on 24 January 2019. Submissions to this Rule change consultation close on 21 March 2019. It is our understanding the final rule change will be published on 18 April 2019.

9. **When is the PADR planned to be published? Can you please be more specific than 2019? (Q1,2,3,4?)**

   TransGrid and Powerlink are current progressing the PADR and anticipate publishing this later in 2019. The timing will depend on the extent of matters raised in submissions to the PSCR, and we will provide more specific timing during the RIT-T process.

10. **How would a non-network solution be paid for? i.e. How would the proponent benefit from providing the solution?**

A non-network solution would be paid directly by TransGrid and/or Powerlink (depending on its location), with those costs then forming part of the regulated network costs paid for by consumers as part of their transmission charges. More specifically, TransGrid and/or Powerlink would recover the cost of non-network solutions in its transmission charges through the grid support pass through mechanism in the National Electricity Rules.

11. **A key strategy conveyed in the ISP is to develop interconnectors through the renewable energy zones. How will the interconnector be optimised to jointly address expanding renewable energy zones in NSW and reducing congestion between Queensland and NSW?**

The options being considered include the construction of new transmission lines that could be routed through renewable energy zones identified in the ISP (particularly in the New England area). This would encourage the development of new generation in those zones

The economic modelling, to be completed during the PADR stage, will assess whether these options deliver a higher net market benefit as a result of their impact on the development of renewable energy zones compared to options that have a narrower focus on only reducing congestion between Queensland and NSW.

12. **How broadly can alternative options be considered? For example other interconnectors or aggressive expansion of local REZ?**

The alternative options being considered in this RIT-T are focused on relieving transmission constraints between NSW and Queensland.

The ISP prepared by AEMO is the vehicle for considering the relative net market benefits of a broader range of options, such as the expansion of alternative interconnector capacities and the development of specific REZs.

However, notwithstanding that the specific options being considered are focused on NSW-Queensland transfer capacity, the scenarios used in the market modelling for this RIT-T will include other transmission developments in the NEM, such as additional interconnection, based on those identified in the ISP. The RIT-T therefore considers the net market benefits of alternatives for QNI expansion, with these other transmission developments assumed to be in place. The proposed scenarios are set out in the Inputs and Methodology Consultation Paper published by TransGrid and Powerlink during the PSCR consultation period.

We will also consider any additional alternative options to meet the identified need that are raised in submissions.

13. **How can proponents assess if future QNI upgrades will affect their MLFs?**

We encourage proponents to engage with AEMO, who publish the methodology for calculating loss factors, as well as the applicable loss factors for each proponent. Further information can be found at https://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Security-and-reliability/Loss-factor-and-regional-boundaries.

14. **Given interconnector flows have been seen to impact existing generators Marginal Loss Factors (MLF) close to interconnectors, does the market benefit analysis take into account Marginal Loss Factors?**

The market modelling methodology, specifically the relevant section on page 20 of the Inputs and Methodology Consultation Paper, explicitly acknowledges impacts that marginal loss factors may have in selecting the preferred option and sets out our proposed approach to taking this into account in the market benefit analysis.

TransGrid and Powerlink propose to use AEMO's latest MLFs estimates over the first five years and will estimate and apply future MLFs for particular generation and transmission development schedules in five

year increments resulting from the market dispatch simulation modelling to refine the long-term investment planning.

15. **Would TransGrid/Powerlink coordinate separate proposals for non-network solutions? For example if it receives separate load & generator reduction proposals from different proponents on either side of the interconnector.**

    We will consider proposals for non-network solutions in combination where they would create a credible option. For example, if a proposal was received from generation on one side of the existing interconnector and load on the other side, we would consider those proposals together to assess that proposal as a credible option. However, we encourage proponents of non-network solutions to also work with other parties to develop credible solutions.

16. **Is the 'Indicative total transfer capacity' inclusive of Directlink and QNI? (Regarding Table 3. P26 of the consultation report)**

    The 'Indicative total transfer capacity' referenced is for QNI only. It does not include the transfer capability of Directlink.

17. **You stated during the presentation that current normal transfer capability ranges from 1,000 to 1,100MW south and ~400MW north. Can you advise the equivalent (daytime, medium demand) actual current transfer limits that these augmentation MW values should be measured against?**
    The equivalent actual transfer limits for the base case are 535MW northerly and 1,030MW in the southerly direction.